AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A power voltage control circuit for a CPU, wherein the CPU has at least one power indication pin to output a power indication signal, the control circuit comprising:

a selection unit having a first input terminal coupled to the power indication pin, a second input terminal and a control terminal;

a register to store an adjustment signal;

a combination unit to produce a first signal and output to the second terminal of the selection unit according to the power indication signal and the adjustment signal;

a selection controller to output a selection signal to the control terminal of the selection unit, such that the selection unit outputting one power indication signal ~~and~~ or the first signal; and

a PWM controller coupled to the selection unit to produce a power voltage to the CPU according to the power indication signal or the first signal.

2. (Original) The control circuit as claimed in claim 1, wherein the CPU is disposed in a computer system, the selection unit outputs the power indication signal when the computer system is operated in a normal mode, and the selection unit outputs the first signal when the computer system is operated in overclock mode.

3. (Original) The control circuit as claimed in claim 2, further comprising a timer controller for outputting a reset signal when the CPU does not operate normally in overclock mode, causing the power indication signal output from the selection unit thereby rebooting the computer system.

4. (Original) The control circuit as claimed in claim 2, wherein the register and the selection controller communicate with the BIOS of the computer system through an interface bus.

5. (Original) The control circuit as claimed in claim 3, wherein the timer controller counts for a predetermined time interval and outputs the reset signal after rebooting the computer system, the BIOS of the computer system outputs a disable signal to terminate counting by the timer controller when the CPU operates normally.

6. (Original) The control circuit as claimed in claim 1, wherein the combination unit comprises:

a decode unit to convert the power indication signal into a digital value according to a corresponding relationship;

an adder to add the digital value and the adjustment signal and output a second signal; and

coding unit to convert the second signal into the first signal and output to the second terminal of the selection unit, according to the corresponding relationship.

7. (Original) The control circuit as claimed in claim 1, wherein the CPU adjusts the power indication signal according to load and operating temperature thereof.

8. (Currently Amended) A control circuit for power voltage of a CPU, wherein the CPU has at least one power indication pin to output a power indication signal, and the CPU adjusts the power indication signal according to load and operating temperature thereof, the control circuit comprising:

a selection unit having a first input terminal coupled to the power indication pin, a second input terminal and a control terminal;

a combination unit to produce a first signal and output to the second terminal of the selection unit according to the power indication signal and an adjustment signal;

a selection controller to output a selection signal to the control terminal of the selection unit, such that the selection unit outputting one power indication signal ~~and~~ or the first signal; and

a PWM controller coupled to the selection unit to supply a power voltage to the CPU according to the power indication signal or the first signal.

9. (Original) The control circuit as claimed in claim 8, wherein the CPU is disposed in a computer system, the selection unit outputs the power indication signal when the computer system is operated in a normal mode, and the selection unit outputs the first signal when the computer system is operated in overclock mode.

10. (Original) The control circuit as claimed in claim 9, further comprising a timer controller for outputting a reset signal when the CPU does not operate normally in overclock mode, causing the power indication signal to be output from the selection unit thereby rebooting the computer system.

11. (Original) The control circuit as claimed in claim 10, wherein the timer controller counts for a predetermined time interval and outputs the reset signal after rebooting the computer system, the BIOS of the computer system outputs a disable signal to stop the counting of the timer controller when the CPU operates normally.

12. (Original) The control circuit as claimed in claim 11, wherein the selection controller communicates with the BIOS of the computer system through an interface bus, and the adjustment signal is an analog signal from an external circuit.

13. (Original) The control circuit as claimed in claim 12, wherein the combination unit is an analog adder to add the power indication signal and the adjustment signal and output the first signal to the second terminal of the selection unit.